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Branch : CSE – A

Sem : 7

Subject : Cyber Security

Lab – 2

Aim : Port Scanning using NMAP.

Input :

nmap -sV scanme.nmap.org

Output :

```
┌──(vaibhav3010㉿kali)-[~]
└─$ nmap -sV scanme.nmap.org
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-07-22 22:03 IST
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.27s latency).
Other addresses for scanme.nmap.org (not scanned): 2600:3c01::f03c:91ff:fe18:bb2f
Not shown: 993 closed tcp ports (conn-refused)
PORT      STATE    SERVICE    VERSION
22/tcp    open     ssh        OpenSSH 6.6.1p1 Ubuntu 2ubuntu2.13 (Ubuntu Linux; protocol 2.0)
25/tcp    filtered smtp
80/tcp    open     http       Apache httpd 2.4.7 ((Ubuntu))
1723/tcp  filtered pptp
5060/tcp  filtered sip
9929/tcp  open     nping-echo Nping echo
31337/tcp open     tcpwrapped
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 172.04 seconds
```

- The command `nmap -sV scanme.nmap.org` performs a service version detection scan on the domain `scanme.nmap.org`.This command is used to scan the target `scanme.nmap.org` to identify open ports and determine the version of the services running on those ports. This helps in understanding the software and versions in use, which can be useful for security assessments and network inventory.

Input :

nmap -sA scanme.nmap.org

Output :

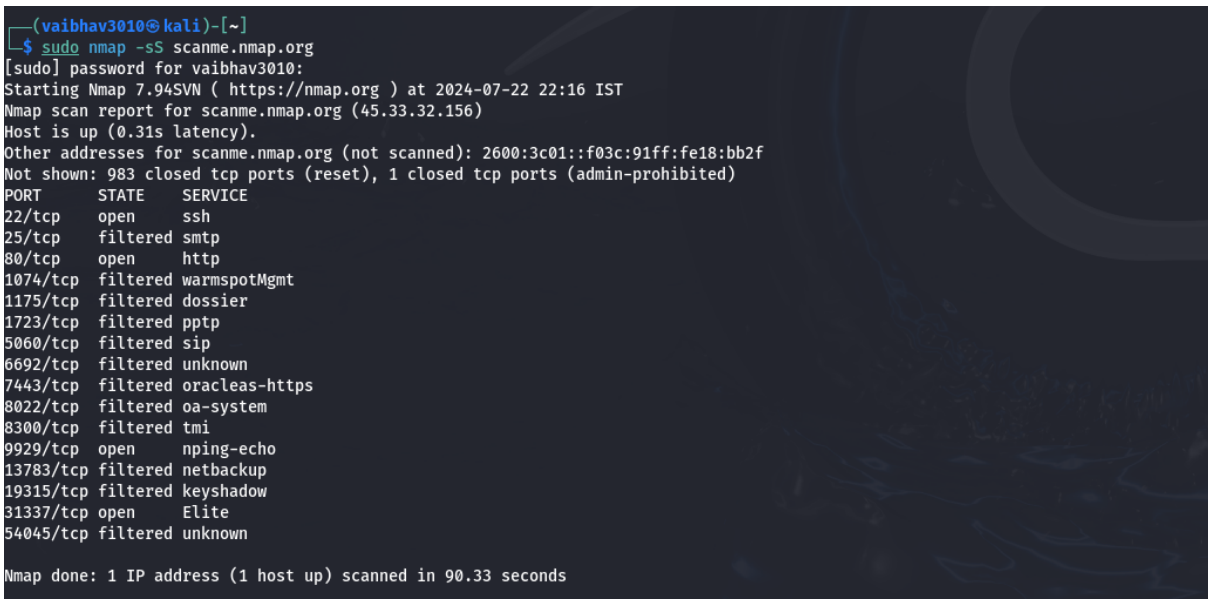
```
┌──(vaibhav3010㉿kali)-[~]
└─$ sudo nmap -sA scanme.nmap.org
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-07-22 22:18 IST
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.068s latency).
Other addresses for scanme.nmap.org (not scanned): 2600:3c01::f03c:91ff:fe18:bb2f
All 1000 scanned ports on scanme.nmap.org (45.33.32.156) are in ignored states.
Not shown: 1000 filtered tcp ports (no-response)

Nmap done: 1 IP address (1 host up) scanned in 22.90 seconds
```

- The command `nmap -sA scanme.nmap.org` performs an aggressive scan to determine firewall rules, detect service versions, and assess the operating system of the target `scanme.nmap.org`. It provides detailed information about the target's network defenses and services.

Input :

nmap -sS scanme.nmap.org

Output :



- The command `nmap -sS scanme.nmap.org` performs a TCP SYN scan on the target `scanme.nmap.org`. It checks for open ports by sending SYN packets and analyzing the responses, providing a quick and stealthy method to identify active services on the target.

Input :

nmap -sO scanme.nmap.org

Output :

- The command `nmap -sO scanme.nmap.org` performs an IP protocol scan on the target `scanme.nmap.org`. It identifies which IP protocols (such as ICMP, TCP, UDP) are supported by the target, helping to understand the network services and communication methods in use.